



## LITHUANIAN SPORTS UNIVERSITY

### STUDY MODULE PROGRAMME (SMP)

|             |                   |     |        |             |                  |      |    |    |              |  |  |
|-------------|-------------------|-----|--------|-------------|------------------|------|----|----|--------------|--|--|
| Module Code | B                 | 420 | B      | 007         | Accredited until | 2019 | 06 | 01 | Renewal date |  |  |
|             | Branch of Science |     | Progr. | Registr. №. |                  |      |    |    |              |  |  |

**Entitlement**

Exercise and Nutrition Across the Lifespan (Nutrition I)

**Prerequisites**

Relevant knowledge in Biochemistry and Physiology

**Course (module) Learning Outcomes**

| №. | Learning Outcomes                                                                                                                                                                                                                                            | Teaching / Learning Methods                                     | Assessment Methods                                       |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|----------------------------------------------------------|
| 1  | ...Good oral and communication skills with targeted audience, ability of knowlwgde and experience transfer                                                                                                                                                   | Discussion, Literature analysis, Literature review presentation | Literature reviewing and presentation, Oral presentation |
| 2  | Students would know and use the valid questionnaires and instruments of the evaluation personal and group nutrition                                                                                                                                          | Group work, Problem-based learning, Seminar                     | Group work, Seminar                                      |
| 3  | Ability to create, apply and evaluate intervention programme directed to individual or a groep based on scientific theories of health promotion                                                                                                              | Problem-based learning, Video footage                           | Problem-solving task, Video footage                      |
| 4  | ...Ability to identify, find, analyse, clasify recent scientific information                                                                                                                                                                                 | Literature analysis                                             | Literature reviewing and presentation, Seminar           |
| 5  | ...Ability to design and carry out moderate difficulty scientific research ,to analyse and discuss and present obtained data to professional and other audience; Ability to use inovative methods for personal consultations on physical activity and health | Gests lectures, Seminar                                         | Examination, Literature analysis                         |

**Main aim**

To promote personal and professional development of students in relation to communication skills, ability to apply recent scientific evidence considering impact of life style modification including changes in nutrition on health.  
 Reflection (PALC-1)  
 Assessing (PALC-3)  
 Changing Behaviour (PALC-4)  
 Research (PALC-5)  
 Developing and Inovations (PALC-6)  
 Knowledge, communication and Management of Ideas (PAC-9)

**Summary**

This module the focus is on principles and essentials of human nutrition, with the main purpose of helping the students to develop a holistic and integrated understanding of this complex multifaceted scientific domain. Students will have understanding of the basics of the subject, the properties and sources of nutrient, and have focused attention upon how nutrition-related factors shape human health and disease across all stages of the life.

**Level of module**

|                    |          |                                                  |
|--------------------|----------|--------------------------------------------------|
| Level of programme |          | Subject group (under the regulation of the area) |
| Cycle              | Type     |                                                  |
| First              | Bachelor | Bendrojo universitetinio lavinimo                |

**Group under financial classification**

## Syllabus

| №.  | Sections and themes                                                                                                                | Responsible lecturer               |
|-----|------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
| 1.  | Introduction. Relationship between nutrition, physical activity and health.                                                        | 499 doc. dr. Daiva Vizbaraitė      |
| 2.  | Macronutrients, micronutrients, requirement and function, impact on health .<br>Energy metabolism, energy requirements.            | 499 doc. dr. Daiva Vizbaraitė      |
| 3.  | Nutrition and metabolism of proteins and amino acids                                                                               | 499 doc. dr. Daiva Vizbaraitė      |
| 4.  | Digestion and metabolism of carbohydrates                                                                                          | 499 doc. dr. Daiva Vizbaraitė      |
| 5.  | Nutrition and metabolism of lipids                                                                                                 | 499 doc. dr. Daiva Vizbaraitė      |
| 6.  | The vitamins and minerals, metabolism and functions                                                                                | 701 doc. dr. Sandrija Čapkauskienė |
| 7.  | Prevalence and development of non-insulin dependent diabetes. Dietary and physical activity recommendation's for diabetic patients | 701 doc. dr. Sandrija Čapkauskienė |
| 8.  | Pregnancy. Dietary recommendations and physical activity during pregnancy. Obesity and pregnancy                                   | 701 doc. dr. Sandrija Čapkauskienė |
| 9.  | Childhood. Nutrition factors affecting growth                                                                                      | 701 doc. dr. Sandrija Čapkauskienė |
| 10. | Adolescence. Nutrition factors. Guidelines for adolescence                                                                         | 701 doc. dr. Sandrija Čapkauskienė |
| 11. | Exercise and nutrition. Exercise Performance                                                                                       | 499 doc. dr. Daiva Vizbaraitė      |

Evaluation procedure of knowledge and abilities:

Ten grade criterion scale and summative evaluation system are applied. The semester's individual work tasks are evaluated by grades; the final grade is given during the examination session while multiplying particular grades by the lever coefficient and summing up the products.

### References

| №. | Title                                                                                                  | Edition in Lithuanian Sports University library |                     | In Lithuanian Sports University bookstore | Number of ex. in the methodical cabinet of the depart. |
|----|--------------------------------------------------------------------------------------------------------|-------------------------------------------------|---------------------|-------------------------------------------|--------------------------------------------------------|
|    |                                                                                                        | Pressmark                                       | Number of exemplars |                                           |                                                        |
| 1. | Gibney M., Vorster H., Kok J. 2002 Introduction to Human Nutrition ISBN 0-63205624-x Oxford, UK        |                                                 | 1                   | No                                        | 1                                                      |
| 2. | Gibney M., Margetts M.B., Kearny M.J., Arab L. 2004 Public Health Nutrition ISBN 0-632-05627 Oxford,UK |                                                 | 0                   | No                                        | 1                                                      |
| 3. | Gibney M., Macdonald A., Roche M. 2003 Nutrition and metabolism ISBN 0632-05625 Oxford, UK             |                                                 | 0                   | No                                        | 1                                                      |
| 4. | Nutrition a lifespan approach (2012) ISBN 978-1-4051-7878-5, Oxford.                                   |                                                 |                     | No                                        | 1                                                      |

### Additional literature

| №. | Title                                                                                                                                                                                             |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | Weijs PJ, Sauerwein HP, Kondrup J. (2012) Protein recommendations in the ICU: g protein/kg body weight - which body weight for underweight and obese patients? Jun;46(8):618-20.Br. J Sports Med. |
| 2. | Weker H. (2006) Simple obesity in children. A study on the role of nutritional factors. Med J.10(1):3-191.                                                                                        |
| 3. | Aller EE, Abete I, Astrup A, Martinez JA, van Baak MA. Starches, sugars and obesity. Nutrients. 2011; (3):341-69                                                                                  |

